



HELP THE EARTH —AND THE— EARTH WILL HELP YOU

We make fertilizer for every product and put on the market only what has been proven of real value. Let us know the purpose for which you want soil helps and we will supply you. Address us

Pacific Guano and Fertilizer Co.
Honolulu, H. I.

INSURANCE

Theo. H. Davies & Co.,
(Limited)
Agents for Fire, Life and Marine Insurance.

Northern Assurance Company,
OF LONDON, FOR FIRE AND LIFE. Established 1836.
Accumulated Funds.....\$2,975,000

British and Foreign Marine Ins. Co.
OF LIVERPOOL, FOR MARINE
Capital.....\$1,000,000

Reduction of rates.
Immediate Payment of Claims.

Theo. H. Davies & Co., Ltd.
AGENTS.

CANADIAN PACIFIC RAILWAY

The Famous Tourist Route of the World.

In Connection With the Canadian-Australian Steamship Line Tickets are Issued

TO ALL POINTS IN THE UNITED STATES AND CANADA VIA VICTORIA AND VANCOUVER

Mountain Resorts:
BANFF, GLACIER, MT. STEPHENS AND FRASER CANYON
EMPRESS LINE OF STEAMERS FROM VANCOUVER

Tickets to All Points in Japan, China, India and Around the World.
For Tickets and general information

Apply to

THEO. H. DAVIES & CO., LTD.
Agents Canadian-Australian S. S. Line.
Canadian Pacific Railway.

Bank of Hawaii

INCORPORATED UNDER THE LAWS OF THE TERRITORY OF HAWAII.

PAID-UP CAPITAL.....\$600,000.00
RESERVE FUND.....200,000.00
UNDIVIDED PROFITS.....102,617.80

OFFICERS:

Charles M. Cooke.....President
F. C. Jones.....Vice-President
F. W. Macfarlane.....2nd Vice-President
C. H. Cooke.....Cashier
C. H. Cooke, Jr.....Assistant Cashier
F. B. Damon.....Assistant Cashier
F. B. Damon.....Secretary

DIRECTORS: Chas. M. Cooke, P. C. Jones, F. W. Macfarlane, E. F. Bishop, E. D. Tenney, J. A. McCandless, C. H. Atherton, C. H. Cooke.

COMMERCIAL AND SAVINGS DEPARTMENTS.

Strict attention given to all branches of Banking.

TRUST BUILDING, FORT STREET.

Castle & Cooke Co., Ltd
Honolulu, T. H.

Commission Merchants

Sugar Factors

Ewa Plantation Co.
Waialua Agricultural Co., Ltd.
Kohala Sugar Co.
Waimea Sugar Mill Co.
Apakaa Sugar Co., Ltd.
Fulton Iron Works of St. Louis.
Blake Steam Pumps.
Weston's Centrifugals.
Babcock & Wilcox Boilers.
Green's Fuel Economizer.
Marsh Steam Pumps.
Matson Navigation Co.
Planters' Line Shipping Co.



Castle & Cooke Co., Ltd Life and Fire Insurance Agents

General Insurance Agents, representing
New England Mutual Life Insurance Company of Boston.
Aetna Fire Insurance Co.

—ATTENTION—

We have just accepted the Agency for the
Citizens Insurance Co. (Hartford Fire).

—and—
The Protector Underwriters of the Phoenix of Hartford.

These were also among the Roll of Honor in San Francisco.

50,000 RATS KILLED IN YEAR

"No plague-infected rat has been discovered in Oahu during the past year, and I may add that no plague-infected rat has been found in Honolulu proper since the opening of this laboratory on July 1, 1907. We are now destroying rats at the rate of 50,000 a year. During the two months just past one of our men has shot between 2500 and 3000 rats from nests in the trees."—From paper read before the Hawaiian Medical Society by Dr. Donald H. Currie, P. A. Surgeon, U. S. Marine Hospital Service, Honolulu.

The systematic and scientific eradication of plague in the Islands by the elimination of rats has been under way in Honolulu for over a year at the laboratory of the United States Marine Hospital Service on Quarantine Island under the direction of Dr. Donald H. Currie, Passed Assistant Surgeon of the Marine Hospital Service. Thousands of rats are being killed monthly and all brought to Dr. Currie are subjected to a bacteriological examination for traces of plague, but since July 1, 1907, not a rat coming under his observation has been found infected. In a comprehensive report on the rat plague, Dr. Currie presented to the Medical Society on Saturday some interesting phases of the scientific war being waged against the rodent as a carrier of the disease. His paper is as follows:

"The following is a brief report of the work done in the plague laboratory of the U. S. Public Health and Marine Hospital Service during the past year.

"This laboratory was established to investigate to ascertain whether plague exists here either among human beings or rodents.

"In order to keep informed in this matter we examine all human cases reported to us as being suspicious of plague and also examine all the rats that we can procure.

"The service bears all the expenses incident to maintaining the laboratory; the cost of procuring the rats is borne by the merchants of this city. This latter work was at first under the direct charge of the Board of Health, and we examined whatever number of rats that they furnished us. Since last April the work of procuring as well as the work of the laboratory has been under our direct charge.

"In supervising the work of procuring rats we divided this city into eight districts and placed a trapper in each; each of these trappers must procure above a given minimum number weekly in order to hold their positions, while promotion to higher pay comes only to those that exceed the minimum requirement. We also have another man that travels over the whole city and shoots into rat nests found in the algaroba trees.

"We have in constant use over 1400 traps and expend 1200 to 1500 rounds of ammunition monthly.

"All rats are brought to the laboratory in closed buckets, where they are dumped immediately into an emulsion of kerosene, soap and water to destroy the fleas, lice and mites that infest them.

"They are then washed in water containing a little phenol to remove the emulsion. The autopsy boys then stretch them on boards and remove the spleen, and if the lymph nodes are enlarged they, too, are excised. From these organs smears are made, stained with carbol-fuchsin, and examined under the 1-12 oil immersion lens. If a slide shows a suspicious rod the number of the slide is noted and from it the rat furnishing it is ascertained; the tag on this rat is examined to see from where it was obtained and all its data noted down. A guinea pig is then inoculated with a portion of the organ of the rat, the dermic method of inoculation alone being employed.

"The suspected rat's body is then burned. Should the animal die (as it will do if the suspicious rod is Bacilli pestis), a pure culture is obtained from its heart's blood and carried through the usual cultural and biological tests.

"In addition to the necropsy and microscopic examination of rats brought to the laboratory each one is also classified as to species, there being four kinds found in Honolulu. The rats that have been dead but a short while are also washed separately and the wash water is examined for fleas; these are sent to Washington for identification. All found so far have been of one kind—viz., *Pulex pallidus*, which is the one that is supposed to be the usual plague-carrier.

"While the following figures are for the year ending October 1, it must be borne in mind that previous to last April we were furnished with very few rats in comparison to what we now receive, less than an average of 170 weekly, the number has progressively increased since that date until we now catch and shoot from 900 to 1100 a week. So that while the year record ending October 1 shows something over 18,000, we are now destroying rats at the rate of about 50,000 a year. The following figures are taken from the records of the laboratory: Number of rats destroyed during the year, 18,239; number of rats examined bacteriologically during the year, 16,377; number of rats showing pest infection, 7. Date of last rat showing pest infection, December 7, 1907.

"All of these rats that showed pest infection were specimens forwarded to me from Hilo in a rat infection that began early last fall and appeared to the end of December. We say 'appeared,' for two human cases were reported from there later, one in February and one in April, so there must have been some rat infection previous to these cases, but none was discovered. No systematic examination has been made of the rats in Hilo. However, specimens are received from there at irregular intervals, examined and reported on. Sanitary Inspector Bowman continues to press as his funds permit by the use of poison.

"It will be seen from the above that no plague-infected rat has been discovered in Oahu during the past year, and I may add that no plague-infected rat has been found in Honolulu proper since the opening of this laboratory on July 1, 1907.

"The following classification as to species will give an idea as to the relative number of each: *Mus musculus*, 5287; *Mus rattus*, 3397; *Mus alexandrinus*, 2098; *Mus norvegicus*, 1882.

"During the two months just past one of our men has shot between 2500 and 3000 rats from nests in the trees. These are the so-called tree rats that disturb our slumbers by playfully galloping over the roof at night. Of these, *Mus alexandrinus* outnumbered *Mus rattus* about two to one. We have yet to obtain a single specimen of *Mus norvegicus* in a tree nest.

Human Cases of Plague.
"The only human cases in these Islands coming to our knowledge during the past year were the two referred to at Hilo. This we consider a most gratifying record.

"We see from the above that most of the data we have obtained from the regular work of plague investigation has been of a negative character. Yet its weekly publication in the Public Health Report has no doubt inspired confidence among public health officials and quarantine officers of other ports, and in that way has been a distinct benefit to the commerce of these Islands.

Deputy Attorney General Larnach who went to Hilo to attend the Circuit Court, has been taken ill and has been obliged to relinquish the grand jury work to Deputy County Attorney Noa Aluli.



It was certainly a good messenger who brought the news to your house that Ayer's Sarsaparilla makes the blood "rich and red." This means so much to those who are thin, pale, feeble, weak, and nervous. After Ayer's Sarsaparilla has cured you, carry the glad message to a friend or neighbor.

Perhaps you suffer from the effects of a warm climate. Prolonged warm weather seriously impairs the strength of many people. The digestion is slow, and the liver becomes sluggish. Impurities in the blood accumulate and cause that feeling of downheartedness and depression.

AYER'S Sarsaparilla
is of the greatest use in such cases. Its purifying, strengthening, and up-building properties will be of inestimable value to you.

As now made, Ayer's Sarsaparilla contains no alcohol.

There are many imitations Sarsaparillas.

Be sure you get "AYER'S."

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass., U.S.A.

HOLLISTER DRUG CO., AGENTS.

REAL ESTATE TRANSACTIONS.

Entered of Record November 17, 1908.
Kaleikauheha N Kupan and hsb to Waianae Company D
A Liberdade Publishing Co, Ltd, to J P Rodrigues B S
Kaoanaha (w) et al to George H Holt L
Liliuokalani to A L C Atkinson L
A Lewis, Jr, and wf to Walter K Waianae D
A Lewis, Jr, and wf to Stella K Waianae D
Entered of Record Nov. 18, 1908.
Frida K Gay to William O Smith, P A Hawn Trust Co, Ltd to Clifford B Wood Par Rel
J F Souza to Emelia C Berio and hsb Rel
Emelia C Berio and hsb to Mary S Andrews D
J M Harrib to von Hamm-Young Co, Ltd C M
Anna Kahalelio, by mtgee, to Tr of German Sav & L Soety et al D
Julia Kaholo to James B Castle D
Entered of Record November 19, 1908.
A G Curtis and wf to F J Williams M
Kapehe Makaula to W K Keoho D
Kapehe Makaula to Iuliana et al D
Peter N Kahokuoluna and wf to Young Men's Sav Soety Ltd M
George Macy to James H Macy D
W O Aiken and wf to Bank of Hawaii Ltd M
Schuman Carriage Co Ltd to James H Fiddes D
Laupahoehoe Sug Co to T K Lala-ken, Rel Rel
J Alfred Magoon to Jas F Woods, Rel Robert Hair, tr, to Susanne C Adams D
Pacific Sugar Mill to Hamakua Ditch Co Ltd L
Pacific Sugar Mill to Hamakua Ditch Co Ltd L
Entered of Record November 20, 1908.
First Bank of Hilo, Ltd, to Nuno Fernandes and wf Rel
Sam B Kanuamo and wf to Clarence G White D
T J Quinn to von Hamm-Young Co, Ltd C M
Nellie M Haley and hsb to Y Holside et al Agrmt
F E Haley to M R Hirochi et al Agrmt
South Kona Agri Co, Ltd, to Territory of Hawaii L
A Lewis, Jr, and wf to John R Hornberger, Tr D
A Lewis, Jr, and wf to Samuel C Bradley D
Loe Lin Kam to Leong Lum B S
Antonio Pires to J C Cluney M
Eric R J Gay by Gdn to Eric R J Gay A M
Kona Agri Co, Ltd, to Supt of Public Instrtn L
J M Dowsett to Eugene H Eme-son A M
May K Kibling and hsb to Wilson Flagler A M
A Lewis, Jr, and wf to George H Holt D
Est of Bernice P Bishop by Trs to Territory of Hawaii Agrmt
Entered of Record Nov 21, 1908.
Hatada Matzato to Ah Hip C M
Watanabi Saki to Ah Hip C M
Kogihara Kitaro to Ah Hip C M
David K Kailimai and wf to John M Henry D
J W H I Kihie and wf to Jos S Ferry D
H Yanagisubito et al to H Hackfeld & Co Ltd C M
German Savs & Loan Soey by dtys Kapiolani Estate Ltd Par Rel
Kapiolani Estate Ltd to Luella R Emmanus D
Alicie M McChesney to Luella R Emmanus B S
O Nakashima to S Shimamoto Rel
Bessie Kalamakee et al by gdn to atty of S Shimamoto L
S Shimamoto to O Nakashima B S
Frederick C Miller to Notice Notice
Frances K Dickey and hsb by atty to Edwin O Hall Ex D
Edwin O Hall and wf to Mutl Bldg Loan Soey of Hawaii Ltd M
Jennie R McLean and hsb to Mutl Bldg & Loan Soey of Hawaii Ltd M
Entered of Record Nov. 23, 1908.
Metropolis Trust & Sav B'k to Rosina Lambert Rel
Lois C Nallimu and hsb to Hilo Sugar Co M
Schuman Carriage Co, Ltd to Hugh McCarrison D
Ernest Wilhelm and wf to Stephen Gumphar D
Frederick E Steere to H B Giffard D
H B Giffard to Charlotte D J Steere, Clifford B Wood and wf to Arthur B Ingalls D
Arthur B Ingalls and wf to Bank of Hawaii Ltd M
K J Iwakima to Takie Okumura L
Alfred Roeha to Likiao Akui L
J B Castle to E E Conant A M
R C A Peterson Tr by Mtgee to William R Castle Tr Fore Aff'dt
Kaola (w) to Chang Tong B S
Tong Chang Wai to Tong Ting B S
Elizabeth W Werner et al to C Akeoni L
Mutl Bldg & Loan Soc of H Ltd to Joao Reizentes Rel
Alicie Metcalf to Jennie R McLean D
Thomas A Kiakona and wf to Mutl Bldg & Loan Soc of H Ltd M
Entered of Record November 24, 1908.
Lihue Planta Co Ltd to Sui Sung Wai Co L
Oahu College by trs to Mid-Pacific Institute D
K Uramoto to Exor of Est of K Odo C M
S Kawai et al and by tr to Henry Silva et al D
Mutl Bldg & Loan Soc of H Ltd to Nettie P Fisher Rel
Nettie P Fisher and hsb to P C Jones Ltd D
Est of S C Allen by trs to Wong Leong A M
Henry J Harrison and wf to Cecil Brown, tr M
James Paikai to Mrs Lizzie K Gil-lland L
Hilo Sugar Co to William Clark and wf Rel
J F Hamburg, tr, to George Rodiek Rel
J F Hamburg, tr, to George Rodiek Rel
Cecil Brown, tr, to Oookala Sugar Planta Co Rel
C Bolte to J Cooper D
Recorded Nov. 13, 1908.
K Nagata to I Nakamura et al, C M; leasehold cor Aala lane and Beretania St, Honolulu, Oahu. \$1350. B 307, p 223. Dated Nov 12, 1908.

BEAUTIFUL SKIN

Hands and Hair Produced by



The most effective skin purifying and beautifying soap in the world, as well as purest and sweetest for toilet, bath, and nursery. The only preventive of pimples, blackheads, red, rough, and oily skin, red, rough hands with itching palms and shapeless nails, dry, thin, and falling hair, and simple baby blemishes, because the only preventive of inflammation and clogging of the PORES.

Sold throughout the world. PORTER DRUG AND CHEM. COMP., Sole Props., Boston. British depot: F. NEWBURY & SONS, London. Send for "How to Cleanse, Purify, and Beautify the Skin, Soap, and Hair" a book of intensely interesting matter to Ladies, sent free.

SCHOOL FOR SUGAR INDUSTRY

School for Sugar Industry at Brunswick

Established 1872. Subsidised by the Government. Enlarged 1876. Frequented hitherto by 1348 persons. Commencement of the Preparatory Course February 15, 1909, of the Principal Course March 2, 1909. Write for program.

The Direction: PROF. DR. FRUHLING, and DR. A. ROSSING.

Anna Macario (widow) to J Matzie (Mrs), D; lot 6, Part 2, Sec 2, R P 3588, Kul 2937, Kapalama, Honolulu, Oahu. \$100. B 305, p 486. Dated Nov 13, 1908.
William R Castle and as Tr and wf to Trs of Mary Castle Trust, D and Par Rel; por R P 666, Kul 2293, Hotel St, Honolulu, Oahu. \$1200. B 305, p 488. Dated Nov 10, 1908.
Walter K Waianae et al to William A Hall, D; int in Ap 5, R P 1903, Kul 3374B, Aala, Honolulu, Oahu. \$550. B 305, p 490. Dated Nov 13, 1908.
Helen K Merithew to atty of Wm A Hall, L; 1/2 int in Ap 5, R P 1903, Kul 3374B, Aala, Honolulu, Oahu. 30 yrs at \$10 per annum. B 313, p 125. Dated Nov 10, 1908.
J Alfred Magoon and wf to Ethel K Abrams, Coretta D; pors lots 8 and 9, Gr 177, of Magoon Tract, Beretania St, Honolulu, Oahu. B 305, p 491. Dated Nov 12, 1908.
A Lewis Jr and wf to Mary A Evans (Mrs), D; int in lots 21-23 and 25, Blk 10, and lots 1 to 12 (incl), Blk 16A, Kapiolani Tract, Honolulu, Oahu. \$857.50. B 305, p 493. Dated Nov 7, 1908.
William C Achi and by Tr to Bd of Hawn Evangelical Assn, D; int in por Kul 2232, Ap 2, King St, Honolulu, Oahu. \$1. B 305, p 495. Dated Oct 30, 1908.
Western & Hawn Investmt Co Ltd to William C Achi, Par Rel; int in 286 sq ft land, King St, Honolulu, Oahu. \$1. B 305, p 495. Dated Oct 20, 1908.
Recorded November 14, 1908.
A Lewis Jr and wf to Evaristo Dotta, D; int in lots 1 to 8 (incl), blk 11, Kapiolani Tract, Honolulu, Oahu. \$624. B 310, p 313. Dated Nov 7, 1908.
A Lewis Jr and wf to Manuel C Picadura, D; int in lots 27 and 28, blk 9, Kapiolani Tract, Honolulu, Oahu. \$230. B 310, p 316. Dated Nov 7, 1908.
J Kanamu (k) to J Kanamu Jr, D; int in por R P (gr) 670, Kapulena, Hamakua, Hawaii. \$15. B 310, p 310. Dated Nov 7, 1908.
Evan da Silva to Manoel Machado, Rel; pes land, Volcano St, Hilo, Hawaii. \$750. B 307, p 236. Dated Nov 12, 1908.
Evan da Silva to S Kawai, Rel; lot 45, series B, patent 4890, Olan, Puna, Hawaii. \$600. B 307, p 227. Dated Nov 12, 1908.
Samuela K Kawai and wf to Evan da Silva, M; lot 45, patent 4890, Volcano Rd, Puna, Hawaii. \$1000. B 307, p 227. Dated Nov 12, 1908.
Kahue (k) to Manuel Medeiros Jr, D; R Ps (grs) 3111 and 2206, blags, etc, Waikona, Kula, Maui. \$700. B 310, p 311. Dated Nov 4, 1908.
Patrick Coekett and wf to Mrs Antonina Ah Sue, D; por ap 3, R P 6560, kul 4672, Kihie, Kula, Maui. \$300. B 310, p 312. Dated Oct 7, 1908.
Hookohu Kaikoo (k) to Maui Land & Railroad Co, D; int in 1 share in R Ps (grs) 149, 221, 160 and 2182, hui land, Peahi, Hamakualoa, Maui. \$140. B 310, p 315. Dated Oct 31, 1908.
Recorded November 17, 1908.
Kaleikauheha N Kupan and hsb to Waianae Co, D; R P 478, kul 3004, and R P 399, kul 2961 and rents, Kahoolawe, etc., Waianae, Oahu. \$100 and mtg \$600. B 310, p 323. Dated November 16, 1908.
A Liberdade Publishing Co to J P Rodrigues, B 8; type, presses, fixtures, acts, etc, of "A Liberdade," \$900. B 304, p 494. Dated November 17, 1908.
Kaoanaha (w) et al to George H Holt, L; R P 2539, kul 9862, Makaha, Waianae, Oahu. 30 years at \$40 per year. B 313, p 129. Dated November 14, 1908.
Liliuokalani to A L C Atkinson, L; por R P 7721, kul 228, lot 2, blags, etc, Waianae-nui, Honolulu, Oahu. Natural

SAVE THE DOCTOR'S FEE.

If you are a man of moderate means and can not afford to employ a physician when you have an attack of diarrhoea, you will be pleased to know that one or two doses of Chamberlain's Colic, Cholera and Diarrhoea Remedy will cure it. For sale at all dealers. Benson, Smith & Co., Ltd., agents for Hawaii.